

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims.

Claims 1-28 (Cancelled)

29. (Currently Amended) An exercise apparatus comprising:

a support frame and a ring gear supported by said support frame, said ring gear comprising an effective working diameter and being generally fixed relative to said support frame;

a crank supported for rotation about a crank axis relative to said support frame, said crank comprising an effective crank-arm length;

a planetary gear positioned within and engaged with said ring gear, said planetary gear being rotationally connected to said crank about a planetary gear axis and comprising an effective working diameter, said planetary gear axis being generally parallel to and offset from said crank axis;

a foot-pedal rotationally connected to said planetary gear, whereby said foot-pedal follows a substantially elliptical foot-path as pedal circulates about said planetary gear axis and said crank rotates about said crank axis; and

~~The exercise apparatus of Claim 28 wherein~~ said effective working diameter of said planetary gear ~~[[is]]~~ being equal to one-half said effective working diameter of said ring gear.

30. (Currently Amended) An exercise apparatus comprising:

a support frame and a ring gear supported by said support frame, said ring gear comprising an effective working diameter and being generally fixed relative to said support frame;

a crank supported for rotation about a crank axis relative to said support frame, said crank comprising an effective crank-arm length;

a planetary gear positioned within and engaged with said ring gear, said planetary gear being rotationally connected to said crank about a planetary gear axis and comprising an effective working diameter, said planetary gear axis being generally parallel to and offset from said crank axis;

a foot-pedal rotationally connected to said planetary gear, whereby said foot-pedal follows a substantially elliptical foot-path as pedal circulates about said planetary gear axis and said crank rotates about said crank axis; and

~~The exercise apparatus of Claim 28 wherein~~ said number of teeth formed on said planetary gear ~~[[is]]~~ being equal to one-half said number of teeth formed on said ring gear.

31. (Currently Amended) An exercise apparatus comprising:

a support frame and a ring gear supported by said support frame, said ring gear comprising an effective working diameter and being generally fixed relative to said support frame;

a crank supported for rotation about a crank axis relative to said support frame, said crank comprising an effective crank-arm length;

a planetary gear positioned within and engaged with said ring gear, said planetary gear being rotationally connected to said crank about a planetary gear axis and comprising an effective working diameter, said planetary gear axis being generally parallel to and offset from said crank axis;

a foot-pedal rotationally connected to said planetary gear, whereby said foot-pedal follows a substantially elliptical foot-path as pedal circulates about said planetary gear axis and said crank rotates about said crank axis; and

~~The exercise apparatus of Claim 28 wherein~~ said effective working diameter of said planetary gear ~~[[is]]~~ being equal to about twice said effective crank-arm length of said crank.

Claim 32 (Cancelled)

33. (Currently Amended) An exercise apparatus comprising:

a support frame and a ring gear supported by said support frame, said ring gear comprising an effective working diameter and being generally fixed relative to said support frame;

a crank supported for rotation about a crank axis relative to said support frame, said crank comprising an effective crank-arm length;

Appl. No. : 10/720,834
Filed : November 24, 2003

a planetary gear positioned within and engaged with said ring gear, said planetary gear being rotationally connected to said crank about a planetary gear axis and comprising an effective working diameter, said planetary gear axis being generally parallel to and offset from said crank axis;

a foot-pedal rotationally connected to said planetary gear, whereby said foot-pedal follows a substantially elliptical foot-path as pedal circulates about said planetary gear axis and said crank rotates about said crank axis;

a major axis of said elliptical foot-path being greater than twice said effective crank-arm length; and

~~The exercise apparatus of Claim 28 wherein~~ said major axis of said elliptical foot-path ~~[[is]]~~ being about quadruple said effective crank-arm length.

Claims 34-37 (Cancelled)

38. (Currently Amended) An elliptical foot-path exercise apparatus comprising:

a support frame;

a crank rotatable relative to said support frame about a crank axis, said crank having an effective crank-arm length;

a foot pedal in mechanical communication with said crank, said foot pedal being sized and arranged relative to said crank so as to follow a substantially elliptical foot-path relative to said support frame and a major axis of said substantially elliptical foot-path being greater than twice said effective crank-arm length;

a planetary gear mechanically coupling said crank to said foot pedal, said planetary gear comprising an effective working diameter and being sized and arranged to engage a sun/ring gear so as to form an epicyclic gear train, and said sun/ring gear comprising an effective working diameter; and

~~The exercise apparatus of Claim 37 wherein~~ said effective working diameter of said planetary gear ~~[[is]]~~ being equal to one-half said effective working diameter of said sun/ring gear.

Claims 39-47 (Cancelled)